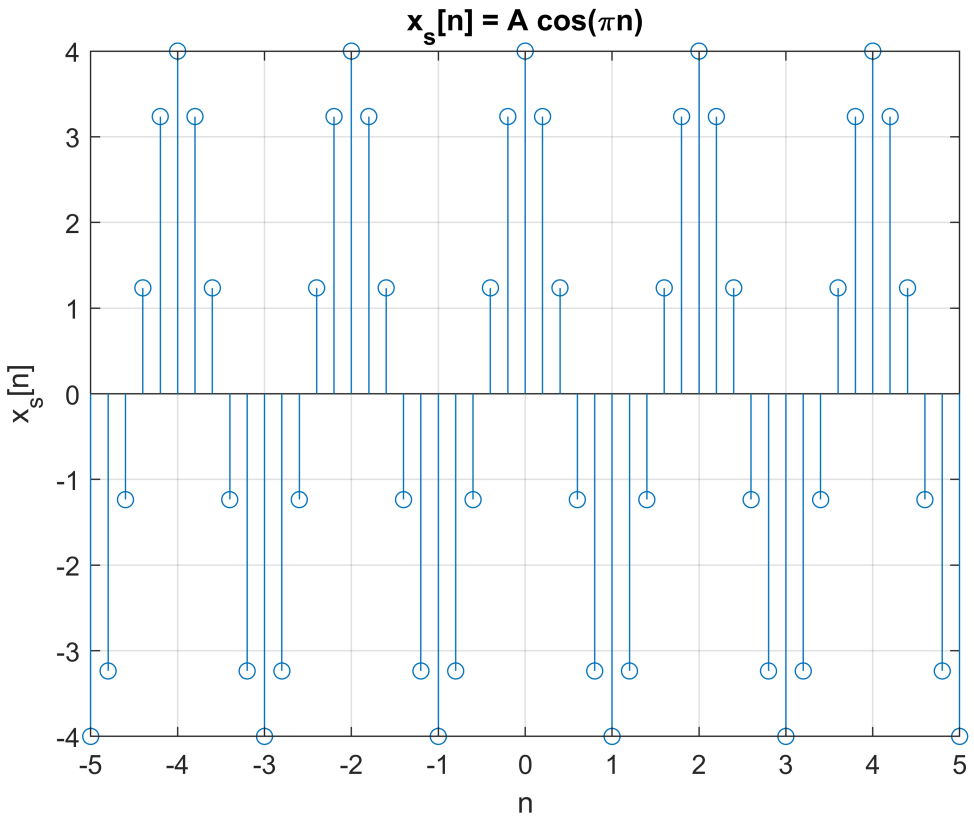
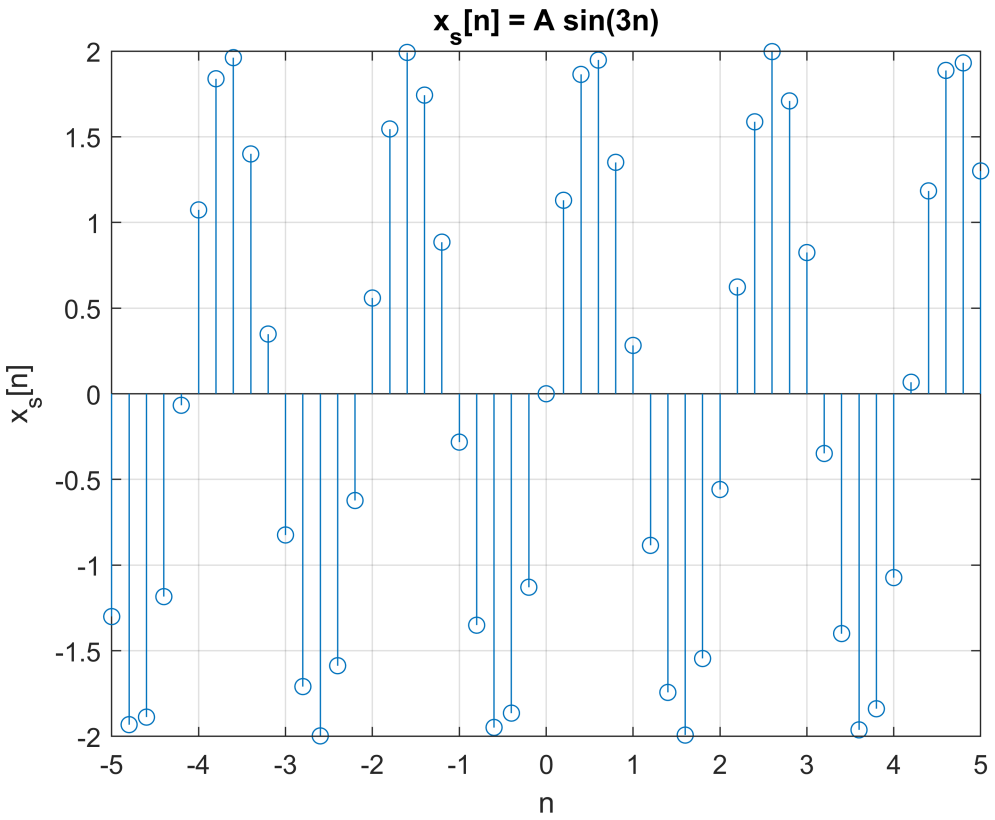
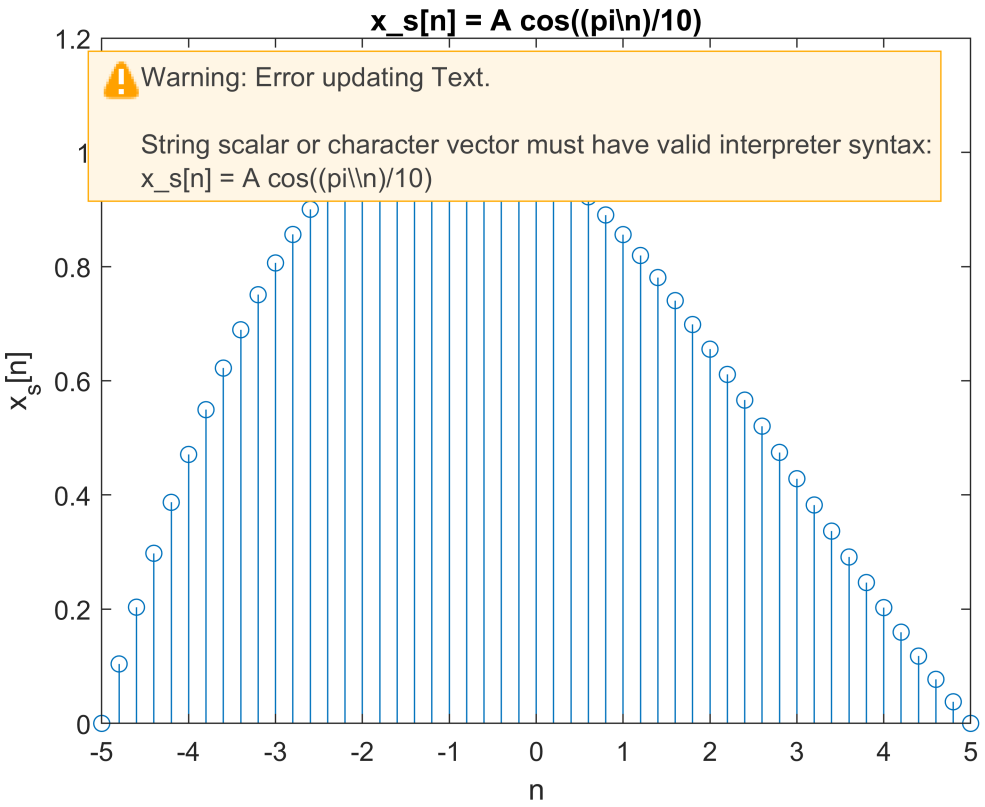
```
%Ex2

clear variables
%a
A=4;
n1=-5; n2=5; n=n1:0.2:n2;
xs = A*cos(n*pi);
stem(n, xs); grid;
xlabel('n'); ylabel('x_s[n]');
xticks(-5 : 5)
title('x_s[n] = A cos(\pin)');
```



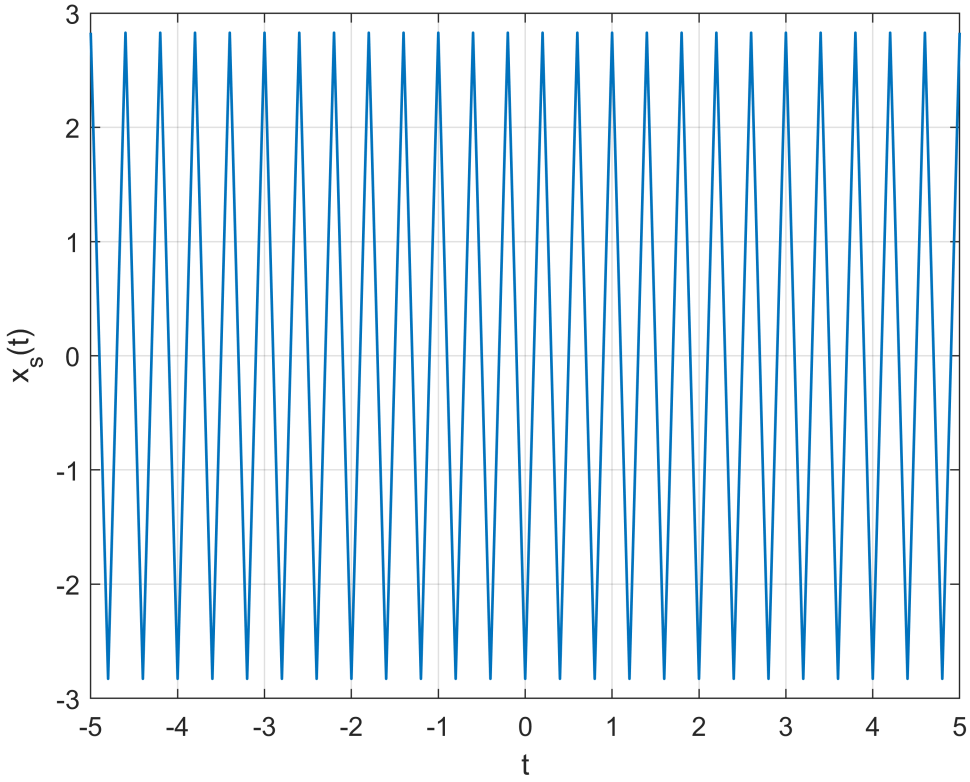

```
clear variables
%b
A=2;
n1=-5; n2=5; n=n1:0.2:n2;
xs = A*sin(3*n);
stem(n, xs); grid
xlabel('n'); ylabel('x_s[n]');
xticks(-5 : 5)
title('x_s[n] = A sin(3n)');
```



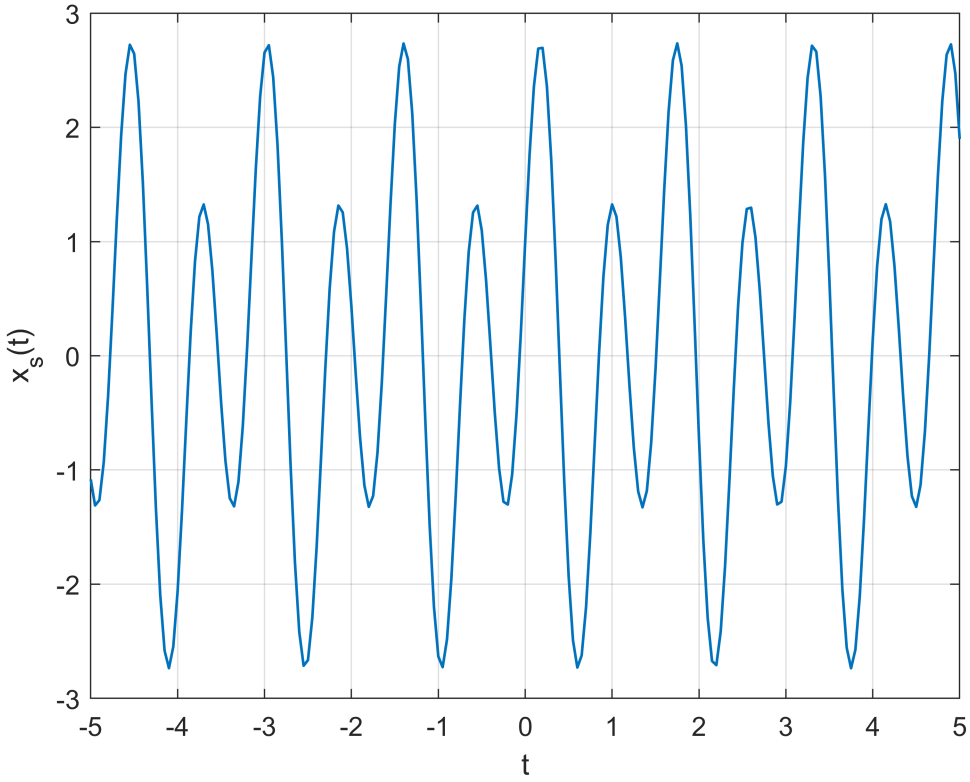

```
clear variables
%c
A=0.9;
n1=-5; n2=5; n=n1:0.2:n2;
xs = (A.^n) .* cos((pi*n)/10);
stem(n, xs);
xlabel('n'); ylabel('x_s[n]');
xticks(-5 : 5)
title('x_s[n] = A cos((pi\n)/10)');
```



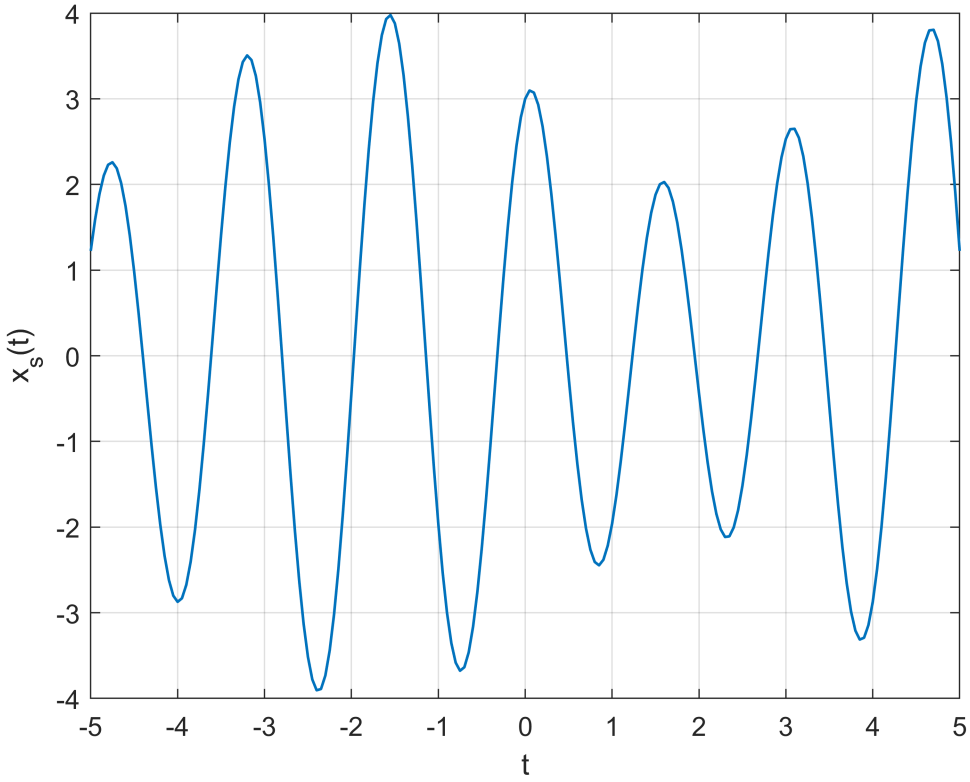

```
clear variables
%d
A=4;
t=-5:0.2:5;
xs = A * sin(5*pi*t - pi/4);
plot(t,xs,'LineWidth',1); grid;
xlabel('t');
xticks(-5 : 5)
ylabel('x_s(t)');
```




```
clear variables
%e
t=-5:0.05:5;
xs = cos(4*t)+2*sin(8*t);
plot(t,xs,'LineWidth',1); grid;
xlabel('t');
xticks(-5 : 5)
ylabel('x_s(t)');
```




```
clear variables
%f
t=-5:0.05:5;
xs = 3*cos(4*t) + sin(pi*t);
plot(t,xs,'LineWidth',1); grid;
xlabel('t');
xticks(-5 : 5)
ylabel('x_s(t)');
```


4
3
2
1
0
-1
-2
-3
-4
$x_s(t)$
-5
-4
-3
-2
-1
0
1
2
3
4
5
t